## ENTOMOLOGICAL ITEMS

Dr. A. S. Packard. The June (1888) numero of the *Popular science monthly* contains a sketch of the life and services to science of Dr. A. S. Packard. A portrait accompanies the article.

EPHEMERIDAE.—Rev. A. E. Eaton having completed his monograph of recent Mayflies (Trans. Linn. soc. Lond. s. 2, v. 3 pp. 352, 65 plates) gives in the June and July numeros of the Ent. mo. mag., a generic synopsis with annotated list of thirty-seven British species.

Entomological Club, A. A. A. S.—The next meeting of the club will be held at Cleveland, Ohio, in the High School building, on Wednesday, the 15th of August, at 9 A. M. Entomologists intending to present papers should send the titles to the same to the secretary, Prof. A. J. Cook, Agricultural College, Michigan in order that they may be announced in the programme.

Lebaron's Reports.—As state entomologist of Illinois, Dr. William Lebaron prepared the four reports for the years 1871 to 1874, the second to the fifth of the series. Prof. S. A. Forbes has copies of these which he will send to entomologists on receipt of the requisite amount of postage. The first report requires three cents postage, the second and third each two cents and the fourth six cents. Prof. Forbes' address is Champaign, Illinois.

Curculio injury to Cherries.—According to experiments carried on at the Ohio station three-fourths of the cherries liable to injury by the Plum curculio, Conotrachelus nenuphar, were saved by spraying the trees with London purple, used in proportion of one ounce to five gallons of water. The spraying was done soon after the blossoms fell. On check trees where the spraying was omitted the curculios did much damage. No trace of the poison was discovered on analysis of the fruit a week after spraying. Spray-

ing with a solution of lime was also tried but was less effective, only forty per cent being saved.

GLOSSINA MORSITANS.—V. Fric, natural history dealer, Wladislawgasse 21. Prague, offers among other interesting entomological material specimens of the famous TSETZEFLY, Glossina morsitans. This species which is allied to our common STABLE-FLY, Stomoxys calcitrans, is so injurious to horses and cattle that some portions of tropical Africa are rendered impassable. Though locally abundant the species is rare in collections. Westwood in Proc. zool. soc. London, 1858, v. 18, describes and figures three species of Glossina and remarks upon their supposed connection with the fourth plague of Egypt.

BEES IN THE MAILS. - Under date of 17 July 1888 the postmaster-general announces "The Canada office having assented to the proposition of this department to admit to the mails exchanged between the United States and Canada packages of queen bees and their attendant bees when so put up as to prevent injury to those handling the mails, while at the same time allowing an easy verification of the contents, packages of bees will hereafter be entitled to transmission by mail to Canada provided they conform to the conditions prescribed for them in the domestic mails of this country, and similar packages received in the mails from Canada should be promply forwarded to their destinations and delivered to addresses."

An Army of Myriopods. — Mr. W. H. Cleaver of East Bethlehem, Pa., writes to Mr. Edwin Linton concerning an army of myriopods as follows, "they are travelling eastward in countless millions. They travel at night or in the cool of the morning and evening. They camp during the day by getting under sods, boards, stones or anything to protect them from the heat of the sun. In some places during the day they are piled up in great numbers. They do not seem to de-

stroy anything on their journey but go harmlessly along. Fowls will not eat them and birds do not appear to molest them."

Mr. Linton identifies the species, with some doubt, as the common *Polydesmus erythropygus*. *Science*, 13 July 1888, v. 12, no. 284, p. 24.

RIVERSIDE NATURAL HISTORY. - Under this title Messrs. Houghton, Mifflin and company have issued a new edition of THE STAN-DARD NATURAL HISTORY (S. E. Cassino & Co.). The insects occupy nearly five hundred pages of the second volume and with the exception of an appendix by Dr. Packard, and a bibliography, of some of the more important publications by Mr. Woodworth, the text of the two editions is unchanged. Dr. Packard's contribution consists of a brief account of the Thysanoptera (Thrips and allies). The bibliography would have been more useful if some arrangement (either alphabetical or chronological) had been followed. Two plates, a swarm of May-flies and the Hercules beetle originally printed plain are given in color; they are taken from Brehm's Thierleben as are a large number of the figures. No credit is given in either of the editions for any of the illustrations; this is a mistake from every point of view. It is as important for the editors and publishers to show, as it is for the neophyte to know, that the illustrations are from eminent authorities.

ON MELANISM IN LEPIDOPTERA.—A casual observation this spring led me to form a hypothesis as to the cause and meaning of melanism in *Lepidoptera*, which appears to explain a considerable majority of the instances, and at the same time, correlates various facts in connection with it, that are otherwise of obscure import. I am not sufficiently acquainted with the literature of the subject to know whether the same hypothesis has been advanced before, but I do not happen to have met with it. Melanism appears to be a western rather than a northern form of variation, to be associated with a wet rather than with a cold climate; and it has certainly been

more common of recent years, which may be attributed to the long succession (unprecedented) of wet seasons we have recently passed through. My observation was on D[iurnea] fagella. Twenty years ago this species afforded here an occasional dark or even black var. Happening to meet with one of these, I searched carefully for two seasons, but only got one black and two dark specimens. For the last year or two (result of wet seasons) they have been fairly numerous. Visiting certain oak trees with a lantern one night lately, and the same observation might, occasion favoring, no doubt have been made during the day. I found the dark var. quite numerous, about one to three of the ordinary form. The point I wish to call attention to is this: the afternoon had been showery, and one side of the trunk was very wet, the other dry, the wet side was of a very dark color, the dry portions pale. and, as a consequence the dark specimens of the fagella were very conspicuous on the dry portions, hardly visible on the wet, whilst with the ordinary form the conditions were reversed, those on the wet bark were conspicnous, those on the dry much less so. This observation appears to admit of generalising, because we know that many trunks of trees, rocks, stones, mosses, &c. are much darker in color when wet, the change often being from pale grev to black, and that most of the species that are subject to melanic variation are such as are in the habit of resting on such objects; natural selection would thus have abundant leverage to work with. I do not know whether the melanism of the Lancashire and Yorkshire districts is acknowledged to depend on the general griminess of all natural objects, trees, stones, &c., but there is no doubt that this blackness of the resting places of insects is intensified when they are wet. This hypothesis will not probably explain all cases of melanism, but it seems to be widely applicable. — T. A. Chapman, in Ent. mo. mag. July 1888, v. 25, p. 40.

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